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LEVITSKIY, KONSTANTIN KONSTANTINOVICH

GRIGOR'YEV, Yuriy Yevgen'yevich; GUL'DENBAL'K, Vadim Vladimirovich;  
~~LEVITSKIY, Konstantin Konstantinovich~~; ROKOTYAN, S.S., re-  
daktor; GORTINSKIY, S.M., redaktor; VORONIN, K.P., tekhnicheskij  
redaktor.

[Construction of the Soviet Union's first long distance 400  
kilovolt electric transmission line] Stroitel'stvo pervoi v  
Sovetskoy Soinuz dal'nei elektroperedachi 400 kv. Pod red. i  
s predisl. S.S. Rokotiana. Moskva, Gos. energ. izd-vo, 1956.  
86 p. (MIRA 10:6)

(Electric lines)

LEVITSKIY, E.E., inzh.; STEKOLNIKOV, I.S., prof.

Questions pertaining to the standardization of insulation. 2nd ed.  
za rub. no.1:25-27 Ja-F '57. (FTB 12:11)

( Electric insulators and insulation)

LEVITSKIY, K.K.

International Electrical Engineering Commission and participation of  
the U.S.S.R. in its activities. Izv. vys. ucheb. zav.; elektromekh.  
no.1:124-134 '58. (MIRA 11:6)

1. Uchenyy sekretar' Sovetskogo natsional'nogo komiteta Mezhdunarodnoy  
Elektrotakhnicheskoy Komissii.  
(Electric engineering)

*Levitskiy, K.K.*  
AUTHORS:

Shekhtman, M.G., Candidate of Technical Sciences, 105-58-5-20/58  
Aksel'rod, M.M., Engineer, Butayev, F.I., Candidate  
of Technical Sciences, Klimov, M.S., Candidate of  
Technical Sciences, Levitskiy, K.K., Engineer

TITLE:

On the Prospects of Employing D.C. Transmission in the USSR  
(O perspektivakh primeneniya elektropredach postoyannogo toka  
v Sovetskom Soyuze)

PERIODICAL:

Elektrichestvo, 1958, Nr 5, pp. 81-83 (USSR)

ABSTRACT:

Comments on the article by N.M.Mel'gunov, Elektrichestvo, 1957,  
Nr 2:  
1.) This is a comment on the article by I.F.Polovoy in  
Elektrichestvo, 1957, Nr 5. A number of errors is criticized. The  
ratio between the costs of an A.C. substation and a D.C. sub-  
station are assumed by Polovoy as amounting to 0.5. According to  
data published by Teploelektroproyekt it is 0.557-0.580 and ac-  
cording to those given by the Institute for Direct Current it is  
0.76 (taking account of the fact that valves are produced in the  
factory). Doubts expressed with respect to the possibility of

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On the Prospects of Employing D.C. Transmission  
in the USSR

105-50-5-20/25

covering reactive (idle) power are unfounded because the rectifier plant has a  $\cos \varphi = 0.90 - 0.95$ . Polovoy does not take power losses in compensation devices into account. He assumes the specific costs of the transformer plant of D.C. substations to amount to 36% of the substation costs. According to Teploelektrproyekt they amount to 26%, and according to the Institute for Direct Current and the All-Union Institute for Electrical Engineering - 17%. According to experience gathered in connection with the line Kashira hydraulic station - Moscow, and according to technical conditions the life of valves between two repairs amounts to 15 000 hours or two years and not one year.

2.) Criticism of the article by Mel'guncv. It is wrong to declare that the costs of D.C. - and A.C. substations including devices for the increase of stability are the same already at the present stage of transformer-engineering, that in the case of long-distance transmission no intermediate output is necessary, that by means of the mercury valve grids the intermediate substations can be reliably disconnected from the long distance line. Advantages and disadvantages of a D.C. line are enumerated.

Card 2/3

On the Prospects of Employing D.C. Transmission  
in the USSR

105-58-5-20/28

The atomic electric power plants will only supplement existing power systems, and hydraulic power still remains the most inexpensive type of energy. The large valves for 130 kV and 300 A developed at the All-Union Institute for Electric Engineering will render D.C. transmission more economical. For high power transmissions of from 0.75 to 6 million kW over distances of 900 km and more direct current offers great advantages.

There is 1 table.

ASSOCIATION: Nauchno-issledovatel'skiy institut postoyannogo toka (Scientific Research Institute for Direct Current)  
Vsesoyuznyy elektrotekhnicheskiy institut im. Lenina (All-Union Institute for Electric Engineering imeni Lenin)  
Teploelektroproyekt

AVAILABLE: Library of Congress

1. Direct currents--Transmission--USSR
2. Electric power plants
- Substations--Effectiveness
3. Atomic power plants--Applications
4. Power plants--Economic aspects

Card 3/3

LEVITSKIY, K.N., inzh.

Importance of the proper organization of the operation and repair  
of equipment. Kozh.-obuv.prom. 6 no.11:6-7 N '64. (MIRA 18:4)



LEVITSKIY, K.N., inzh.

Norm setting for auxiliary operations in shoe enterprises.  
Kozh.-obuv. prom. 7 no.6:10-11 Je '65. (MIRA 18:8)

KARPULEV, L.M.; LEVITSKIY, K.O.

Study of a wireless galvanic communication channel with the bottom  
of a well. Vop. pered. inform. 1:136-149 '62. (MIRA 16:6)  
(Telemetry)

LEVITSKIY, K. P.

Technology

Chrome-plating parts of machines and instruments, Kiev, Mashiz, 1951.

Monthly List of Russian Accessions, Library of Congress, Dec. 1952, Unclassified.

LEVITSEII, L.

Uskorenie protsessov gal'vanicheskikh pokrovov (Acceleration of electroplating processes). Moskva, Mashin, 1951. 156 p.

SO: Monthly List of Russian Accessions, Vol. 7, No. 7, Oct. 1951

LEVITSKIY, L., aspirant

Secrets of soap. Tekh.mol. 28 no.11:37-39 '60. (MIRA 13:12)

1. Institut fizicheskoy khimii AN SSSR.  
(Surface-active agents) (Wetting agents)

LEVITSKIY, L.

New procedure for the settlement of accounts between state grain  
procurement organizations and the budget. Fin.SSSR 17 no.3:79-82  
Mr '56. (Grain trade--Finance) (MIRA 9:7)

LEVITSKIY, L. nauchnyy sotrudnik

History of the names of elements. Nauka i zhizn' 28 no.11:98  
N '61. (MIRA 14:12)

1. Akademiya nauk SSSR.  
(Weightlessness)

LEVITSKIY, L.

Genealogy of the names of elements (continuation). Nauka 1  
zhizn' 28 no.12:43 D '61. (MIRA 15:2)  
(Chemical elements)



LEVITSKIY, L.

Genealogy of the names of elements. Nauka i zhizn' 29 no.3:84-85 Mr  
'62. (MIRA 15:7)

(Chemical elements)

LEVITSKIY, L.

Genealogy of the names of elements. Nauka i zhizn' 29 no.2:  
29 7 '62. (MIRA 15:3)  
(Chemical elements)

LEVINSKIY, L.O.

Reinforced concrete construction elements used in Yugoslav industrial buildings. Mekh.trud.rab. 10 no.43-46 Je '56. (MLRA 9:8)

1. Glavnyy inzhener Glavleningradstroya.  
(Yugoslavia--Reinforced concrete construction)

LEVINSKIY, L.G., inzhener.

Precast reinforced concrete arched envelope, double curvature  
concrete roofs with a span of 18 x 18 meters. Nov.tekh.i pered.  
op.v stroi. 18 no.6:3-5 Je '56. (MLBA 9:8)  
(Roofs) (Precast concrete construction)

LEVITSKIY, L.I.

Dessertation: "Clinical Observation of Choleystitis and Remote Results of  
Surgical treatment."

21 Mar 49

First Moscow Order Of Lenin Medical Inst

SO Vecheryaya Moskva  
Sum 71

CAND MED SCI

LEVITSKIY, L.I.

USSR/Biology - Ichthyology

Card 1/1 : Pub. 86 - 33/39

Authors : Levitskiy, L. I.

Title : Blind carp

Periodical : Priroda 44/3, page 122, Mar 1955

Abstract : An account is given of a carp which was accidentally blinded in both eyes and then set free in the pond. Future observation showed that the absence of vision did not materially interfere with the carp's feeding.

Institution : ..... Gosplanovskiy plemennoy rybnyy punkt, Min.  
Submitted : ..... sel'skogo khozyaystva USSR

LEVITSKIY, M.V.; TOTROV, G.V.; MAR'YENKOV, V.V.; LEVITSKIY, L.M.

Dispersed composition of dusts in complex ore mining. Izv.  
vys.ucheb.sav.; tsvet.met. 2 no.6:26-34 '59.  
(MIRA 13:4)

1. Severokavkazskiy gornometallurgicheskiy institut. Kafedra  
spetskursov gornogo dela.  
(Nonferrous metals) (Mine dusts)

LEVITSKIY, L.M.; NIKITINA, S.A.; TAUBMAN, A.B.

Formation of micelles in solutions of surface-active substances  
and kinetic wetting. Dokl. AN SSSR 149 no.3:633-636 M<sub>r</sub> '63.  
(MIRA 16:4)

1. Institut fizicheskoy khimii AN SSSR. Predstavleno  
akademikom P.A.Rebinderom.  
(Micelles) (Surface-active agents)



LEVITSKIY, L.M.

Therapeutic diets following gastric resection for cancer. Nov. med.  
Moskva No.22:45-52 1951. (CINL 21:5)

Dissertation: "Permeability of Capillaries [Serving] the Peripheral Nervous System in Nutritional Disturbances and the Effect on them of Protein in the Feeding Schedule." Dr Med Sci, Acad Med Sci USSR, 1 Jun 54. Vechernyaya Moskva, Moscow, 21 Nov 54.

SO: SUM 284, 26 Nov 1954

LEVITSKIY, L.M., doktor meditsinskikh nauk.

Regimen and diet in liver diseases. Zdorov'e 1 no.8:20-21 Ag '55  
(MLRA 9:5)

(LIVER--DISEASES) (DIET IN DISEASE)

LEVITSKIY, L.M.

GERM A

The amount of enzymes in the duodenal juice and feces of patients following an operation for resection of the stomach because of cancer. S. Ya. Mikhlin and L. M. Levitskiy (Nutrition Inst., Acad. Med. Sci. U.S.S.R., Moscow). *Vopr. Pitaniya* 14, No. 2, 81-8 (1976).—In duodenal juice of patients (30), who 4-5 months earlier withstood resection of the stomach because of cancer, the following enzymes were identified and detd. (control given in parentheses): enterokinase 1500-5000 (200-670); trypsin and amylase 135-720 (135-720); and lipase 12-60 units/ml. (70-200), resp. In gastric juice the amt. of pepsin was greatly decreased. In feces of the patients the amt. of enterokinase was greatly increased; however, its abs. amt. fluctuated widely from 40-90 to 300-600 (200-350) units/g. (10-20). In the great majority (27) of the patients the alk. phosphatase was also greatly increased: 200-600 units/g. feces (40-90). The amt. of sucrose in most cases was the same as in healthy men. Presumably, because of the exclusion of gastric digestion, the enzymic activities of pancreatic and duodenal juices are correspondingly increased. B. Wierzbicki

Medicine - Nutrition

FD-3290

Card 1/1 Pub. 141 - 5/19

Author : Yegorov, M. N.; Levitskiy, L. M.; Prostiyakov, K. M.

Title : Therapeutic nutrition for obesity

Periodical : Vop. pit., 17-26, Jul/Aug 1955  
14, No. 4

Abstract : Two basic diets are administered to patients being treated for obesity at the Clinic of Therapeutic Nutrition, Academy of Medical Sciences USSR. Diet I, a preliminary diet used to get the system adapted to decreased caloric intake, consists of the following: proteins - 18%; fats - 28%; carbohydrates - 54%. The patients are then placed on Diet II, which consists of: proteins-28%; fats - 44%, carbohydrates - 28%. Three variations of each of the above diets were also used to fit individual cases, i.e. according to age, weight, sex, etc. In conjunction with the dieting, special contrast days were used wherein the same low caloric content was maintained, but the menu consisted almost entirely of either fats, proteins or carbohydrates. Changes in eating schedule were used to break the stereotype of eating, thus decreasing the appetite. Discusses the physiological aspects of the above diet which is said to rapidly improve the regulation of fat metabolism without any harmful side effects. Three tables; four graphs; no references.

Institution : Clinic of Therapeutic Nutrition, Acad Med Sci USSR, Moscow

LEVITSKIY, L.M.

~~LEVITSKIY, L.M.~~  
Precancerous diseases and reasons for late diagnosis of gastric cancer. Sov.med.19 no.7:32-38 J1 '55. (MLRA 8:10)

1. Iz kliniki lechebnogo pitaniya Instituta pitaniya Akademii meditsinskikh nauk SSSR (dir.-chlen-korrespondent Akademii meditsinskikh nauk SSSR prof. O.P.Molchanova)

(STOMACH, neoplasms  
diag.relation to precancerous dis.)

(GASTROINTESTINAL DISEASES  
preceding cancer of stomach, dia.)

*LEVITSKIY, L. M.*

YEGOROV, Mikhail Nikolayevich; LEVITSKIY, Leonid Makar'yevich

[Obesity; pathogenesis, clinical aspects, treatment] Ozhirenie;  
patogenez, klinika, lechenie. Moskva, Medgiz, 1957. 234 p.  
(CORPULENCE) (MIRA 11:5)

YEGOROV, M.N.; LEVITSKIY, L.M.; PROSTYAKOV, K.M.

Clinical aspects and treatment of obesity. Vop.pit. 16 no.5:36-44  
S-O '57. (MIRA 11:3)

1. Iz kliniki lechebnogo pitaniya (zav. - prof. F.K.Men'shikov)  
Instituta pitaniya AMN SSSR, Moskva.  
(OBESITY.  
(Rus))



MIKHLIN, S.Ya.; LEVITSKIY, L.M. (Moskva)

The enzyme secretion function of the intestines and pancreas following gastric resection for cancer. Klin.med, 35 no.4:56-60 Ap '57.

(MLRA 10:7)

1. Iz laboratorii pishchevareniya (sav. - prof. G.K.Shlygin) i kliniki lechebnogo pitaniya Instituta pitaniya AMN SSSR (dir. - prof. F.K.Men'shikov)

(GASTRECTOMY, in various dis.

cancer of stomach, eff. on intestinal & pancreatic enzyme secretion)

(STOMACH NEOPLASMS, surg.

gastrectomy, eff. on intestinal & pancreatic enzyme secretion)

(PANCREAS, physiol.

enzyme secretion, eff. of gastrectomy for cancer of stomach)

(INTESTINES, physiol.

sane)

*LEVITSKIY*  
MIKHILIN, S.Ya.; LEVITSKIY, L.M. (Moskva)

Remote effect of gastric resection in cancer on enzymatic function of the small intestine. Klin.med. 36 no.2:67-70 F '58.  
(MIRA 11:4)

1. Iz laboratorii fiziologii pishchevareniya (zav. - prof. G.K. Shlygin) i kliniki lechebnogo pitaniya (zav. - prof. F.K.Men'shikov) Instituta pitaniya AMN SSSR.

(GASTRECTOMY, effects,  
on small intestine enzyme content, in cancer surg.  
(Rus))

(INTESTINE, SMALL, physiology,  
enzyme prod., eff. of gastrectomy in cancer (Rus))

(ENZYMES,  
in small intestine, eff. of gastrectomy in cancer (Rus))

LEVITSKIY, L.M.; MAKARYCHEV, A.I.; ROSHCINA, L.F.

Dietotherapy in obesity and its relation to cortical dynamics.  
Zhur.ob.biol. 20 no.2:11-19 Mr-Apr '59. (MIRA 12:5)

1. Iz laboratorii vysshey nervnoy deyatel'nosti (zav. - prof.  
A.I.Makarychev) Instituta pitaniya AMN SSSR, Moskva.

(REFLEX, CONDITIONED,

determ. of cortical reactions to dietother. of  
obesity (Rus))

(DIETS, in var. dis.

obesity, conditioned reflex determ. of cortical  
reaction (Rus))

(OBESITY, ther.

diets, conditioned reflex determ. of cortical  
reaction (Rus))

LEVITSKIY, L.M., doktor med.nauk; YEGOROV, M.N., prof.; KUDINOVA, T.I.;  
LIBERMAN, A.B.; ZIKHEYVA, V.K. (Moskva)

Associated antibiotic and dietetic therapy in chronic infectious  
angiocholecystitis [with summary in English]. Klin.med. 37 no.2:  
79-87 F '59. (MIRA 12:3)

1. Iz kliniki lechebnogo pitaniya (zav. - prof. F.K. Men'shikov)  
Instituta pitaniya AMN SSSR (dir. - chlen-korrespondent AMN SSSR  
prof. O.P. Molchanova).

(CHOLECYSTITIS, therapy,

antibiotics & diet ther. in chronic infect. angio-  
cholecystitis (Rus))

(BILE DUCTS, dis.

chronic infect. angiocholecystitis, antibiotic &  
diet ther. (Rus))

(ANTIBIOTICS, ther. use,

chronic infect. angiocholecystitis, with diet ther. (Rus))

(DIETS, in var. dis.

chronic infect. angiocholecystitis, with antibiotics  
(Rus))

LEVITSKIY, L.M.; MAKARYCHEV, A.I.; ROSHCINA, L.F.

Dynamics of cortical activity in patients with obesity in relation  
to the degree and form of the disease. Vop.pit. 19 no.1:16-21  
Ja-P '60. (MIRA 13:5)

1. Iz Instituta pitaniya AMN SSSR, Moskva.  
(OBESITY physiology)  
(CEREBRAL CORTEX physiology)

LEVITSKIY, L.M.

Role of nutrition in prophylaxis and therapy for patients with  
malignant tumors. Vop.pit. 20 no.3:5-12 My-Je '61. (MIRA 14:6)

1. Iz Instituta pitaniya AMN SSSR, Moskva.  
(CANCER) (DIET IN DISEASE)

MAKARYCHEV, A.I. [deceased]; LEVITSKIY, L.M.; GOLUBEVA, L.Ya.;  
ROSHCHINA, L.F.

Cerebral cortex dynamics in patients with obesity during  
various stages of treatment. Vop. pit. 21 no.2:41-47 Mr-Apr '62.  
(MIRA 15:3)

1. Iz kliniki lechebnogo pitaniya (zav. - doktor meditsinskikh  
nauk L.M. Levitskiy) i laboratorii vysshey nervnoy deyatel'nosti  
(zav. - prof. A.I. Makarychev [deceased]) Instituta pitaniya  
AMN SSSR, Moskva.

(CORPULENCE)

(CEREBRAL CORTEX)

YEGOROV, M. N., prof.; LEVITSKIY, L. M., doktor meditsinskikh nauk (Moskva)

Curability of some forms of diabetes mellitus. Klin. med. no.8:  
19-25 '61. (MIRA 15:4)

1. Iz kliniki lechebnogo pitaniya (zav. - doktor meditsinskikh nauk L. M. Levitskiy) Instituta pitaniya AMN SSSR (dir. - chlen-korrespondent AMN SSSR prof. O. P. Molchanova)

(DIABETES)



YEGOROV, Mikhail Nikolayevich, prof.; LEVITSKIY, Leonid Markovich,  
doktor med. nauk; IPATOV, V.P., red.

[Obesity] Ozhirenie. Izd.2., perer. i dop. Moskva, Meditsina, 1964. 305 p. (MIRA 18:1)

3.1540  
3,2430

38248  
S/169/62/000/005/090/093  
D228/D307

AUTHORS: Dvoryashin, A. S., Levitskiy, L. S. and Pankratov, A. K.

TITLE: Chromospheric flares and solar corpuscular radiation in high- and low-energy regions

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 5, 1962, 30-31, abstract 5G223 (Izv. Krymsk. astrofiz. observ., 26, 1961, 90-135)

TEXT: The authors investigate the interrelation between absorption in high geomagnetic latitudes and the magnetic field's disturbances in the period 1957-1959 in connection with the processes in active regions on the sun. It is concluded from the analysis of the experimental data that during the development of chromospheric flares high-energy protons (10 - 100 Mev) are generated on the sun and ejected from the regions of chromospheric flares simultaneously with the plasma clouds, causing magnetic storms on the sun. There is a time lag in the arrival of

S/169/62/000/005/090/093  
D228/D307

Chromospheric flares and ...

protons (10 - 100 Mev) and from the duration and the isotropism of proton settling upon the polar cap that there are interplanetary magnetic fields. Their sources are local magnetic fields of the active regions, which are carried away by the movement of plasma. This deduction is confirmed by the fact that rapid arrivals of protons from flares are observed, if the flare previously arising in the given region induced a magnetic storm. This means that protons are injected into the approximately radial magnetic field, formed on the growth of the local magnetic field of the active regions by the movement of previously ejected plasma. A series of prolonged absorptions in the polar cap in the period 1957-1959 can be explained by the injection into such a field of high-energy protons, generated in flares arising in a given active region on its passage along the disc. While restraining the diffusion of generated protons throughout the solar system, the entrainable magnetic field at the same time causes a deeper and sharper Forbush abatement with a prolonged recovery. Since the magnetic field remains linked with the sun, it is already somewhat twisted by the latter's rotation at a distance of one astronomic unit. This de-

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S/169/62/000/005/090/093  
D228/D307

Chromospheric flares and ...

duction is confirmed by the difference in the time lag in the arrival of high-energy protons, injected by flares arising on the western or the eastern hemisphere of the sun. From the comparison of the absorption in the polar cap, in the auroral zone, and in lower geomagnetic latitudes, when the magnetic field's state is variable, it is established that: 1) the settling of protons (10 - 100 Mev) in high latitudes may occur before the SC of a magnetic storm, during the storm, and after its termination; 2) on the outbreak of a magnetic storm the absorption region spreads from the polar cap to engulf the auroral zone and lower latitudes; 3) each magnetic storm is by no means always accompanied by absorption in the polar cap; 4) flares, to whose development the generation of a large number of protons (10 - 100 Mev) is related, induce magnetic storms with a smaller time lag; 5) the strength of a magnetic storm is weakly connected with the number of settling protons (10 - 100 Mev); and 6) the intensity of a magnetic storm depends on the coordinates of the flare which caused the storm. [Abstracter's note: Complete translation.]

Card 3/3

DVORYASHIN, A.S.; LEVITSKIY, L.S.; PANKRATOV, A.K.

Active solar regions and their corpuscular emission. Astron. zhur.  
38 no.3:419-438 My-Je '61. (MIRA 14:6)

1. Krymskaya astrofizicheskaya observatoriya AN SSSR.  
(Solar radiation)

S/033/62/039/003/003/010  
E032/E114

3,2430

AUTHORS: Dvoryashin, A.S., Levitskiy, L.S., and Pankratov, A.K.  
TITLE: X-ray emission of flares  
PERIODICAL: Astronomicheskiy zhurnal, v.39, no.3, 1962, 428-438  
TEXT: The authors describe a method of studying the X-ray emission of flares which involves the use of the minimum reflection frequencies  $f_{min}$  obtained from the world-wide network of ionospheric stations. The idea is that since the path traversed by the radiation in the atmosphere is different for different stations, the atmosphere may be looked upon as a type of filter, so that the energy of the photons reaching a particular station depends on its position in the atmosphere. The experimental data on chromospheric flares of importance 3 and 3+ were taken from the observatory working list of flares reported by H.W. Dodson and E.R. Hederman. Among flares of importance 2+ only proton flares were included in the analysis. Finally, radio bursts at 9400 Mc/sec and the minimum frequencies  $f_{min}$  were taken from published data of the Crimean Astrophysical Observatory and from Card 1/2

X-ray emission of flares

S/033/62/039/003/010  
E032/E114

IGY data. Analysis of the relation between the time characteristics (onset, maximum, and termination) of X-ray and radio emission of flares on the one hand, and optical characteristics in the visible part of the spectrum on the other, has shown that the time dependence of the X-ray and radio emission is very nearly the same, but the  $H\alpha$  emission of flares begins earlier than the other two. Comparison of the minimum frequencies  $f_{min}$  recorded during

ordinary and proton flares showed that there is considerable increase in the intensity of X-ray emission during proton flares. The energy of the ionising radiation has been estimated for the proton flares of March 23, 1958, and June 14, 1959. Assuming that the additional ionization in the ionosphere at tangential incidence of the radiation on the D layer occurs at about 60 km, it is shown that hard photons with energies of up to about 1 Mev should be generated in proton flares. There are 5 figures and 2 tables.

ASSOCIATION: Krymskaya astrofizicheskaya observatoriya Akademii nauk SSSR (Crimean Astrophysical Observatory, AS USSR)

SUBMITTED: December 26, 1961.  
Card 2/2

41287

S/035/62/000/010/040/128  
A001/A101

3.24.6

AUTHORS: Dvoryashin, A. S., Levitskiy, L. S., Pankratov, A. K.

TITLE: Chromospheric flares and corpuscular radiation of the Sun in regions of low and high energies.

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 10, 1962, 54 - 55, abstract 10A376 ("Izv. Krymsk. astrofiz. observ.", 1961, v. 26, 90 - 135, English summary)

TEXT: The authors investigate a relation between absorption in high geomagnetic latitudes and disturbance of the magnetic field during 1957 - 1959 in connection with processes in active regions on the Sun. Analyzing experimental data, conclusions have been drawn on generation on the Sun of high-energy protons (10 - 100 Mev) during development of chromospheric flares and their ejection from the chromospheric flare regions simultaneously with plasma clouds causing magnetic storms on the Earth. Existence of interplanetary magnetic fields was concluded from the long delay time in arriving protons (10 - 100 Mev) and duration and isotropy of settling of protons onto the polar cap. Their

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S/035/62/000/010/005/128

Chromospheric flares and corpuscular radiation of the.. A001/A101

sources are local magnetic fields of active regions, carried along by plasma motion. This conclusion is confirmed by the fact of rapid arrival of protons from flares, when a flare originated earlier in the given region caused a magnetic storm. This means that protons are injected into an approximately radial magnetic field arisen due to motion of previously ejected plasma carrying along the local magnetic field of active regions. A series of lasting absorptions in the polar cap in 1957 - 1959 is explained by injection into such a field of high-energy protons generated in flares arising in the given active region during its passing over the disk. The carried magnetic field restrains diffusion of generated protons in the entire solar system and causes a deeper and sharper Forbush dip with a long recovery. Since the magnetic field remains to be bound with the Sun, it is somewhat twisted by the solar rotation at a distance of 1 AU. This conclusion is confirmed by a difference in delay times of arrivals of high-energy protons injected by flares arising on the western or eastern hemisphere of the Sun. It has been established by comparing absorption in the polar cap, the zone of auroras and in the lower geomagnetic latitudes, at the different states of the magnetic

Card 2/3



S/035/62/000/010/040/128

Chromospheric flares and corpuscular radiation of the.. A001/A101

field, that: 1) Settling of protons (10 - 100 Mev) in high latitudes may occur prior to a magnetic storm with sudden commencement, during the storm and after its termination; 2) The absorption zone extends from the polar cap, with the commencement of a magnetic storm, to the auroral zone and lower latitudes; 3) Not every magnetic storm is accompanied by absorption in the polar cap; 4) Flares associated with generation of many protons (10 - 100 Mev) cause magnetic storms with a shorter delay time; 5) The strength of a magnetic storm is weakly related to the number of settled protons (10 - 100 Mev); 6) Intensity of magnetic storms depends on coordinates of the flare which caused the storm. There are 77 references.

Author's summary

[Abstracter's note: Complete translation]

Card 3/3

S/035/62/000/010/041/128  
A001/A101

AUTHORS: Dvoryashin, A. S., Levitskiy, L. S.

TITLE: Solar corpuscular radiation during the descending branch  
of the solar activity cycle

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 1962, 55,  
abstract 10A377 ("Izv. Krymsk. astrofiz. observ.", 1962, v. 27,  
167 - 177)

TEXT: The authors survey briefly empirical and theoretical investigations  
of relation of geomagnetic disturbances to active regions on the Sun during the  
descending branch of the solar activity cycle. Individual geomagnetic disturbances  
are correlated with active regions on the Sun, whose indicators are flocculi,  
during the period from February 1940 to May 1944. All the flocculi (active re-  
gions) observed during this time are divided into two groups: flocculi of group  
I which crossed the visible disk center or touched it at the instant of passing  
through the central meridian, and flocculi of group II for which heliocentric  
angle  $\psi$ , i.e., distance between the parallel of the visible disk center and the

Card 1/2

S/035/62/000/010/041/128  
A001/A101

Solar corpuscular radiation during the...

flocculus part nearest to it, is equal or larger than  $6^{\circ}$ . Group II, in its turn, was divided into 2 subgroups: a) flocculi of group II<sub>f</sub> located in the same hemisphere as the visible center (favorable hemisphere); b) flocculi of group II<sub>u</sub> located in other hemisphere. Information on disturbances of magnetic field was taken from Geomagnetic Indices Cand. K., 1940 - 1946 (Washington, 1948). Data on flocculi of group I were obtained by E. R. Mustel' by inspecting Medona spectroheliograms and, for some cases, were obtained from the observatories Kodaiikanal and Mound-Wilson. Data on the flocculi of group II were taken from synoptic charts of the chromosphere. The method of superposition of epochs was employed for investigating all flocculi groups, which yielded the following results: for central flocculi a right maximum at the phase +5<sup>d</sup> is observed; for non-central flocculi no stable regularity whatsoever exists. This confirms earlier conclusion on existence of radial corpuscular fluxes starting from active regions. Physical characteristics of slow corpuscular fluxes from the Sun are discussed on the basis of experimental and theoretical data. There are 56 references.

From author's summary

[Abstracter's note: Complete translation]

Card 2/2

DVORYASHIN, A.S.; LEVITSKIY, L.S.; PANKRATOV, A.K.

Study of flares in the X-ray spectral region. Astron.zhur. 39  
no.3:428-438 My-Je '62. (MIRA 15:5)

1. Krymskaya astrofizicheskaya observatoriya AN SSSR.  
(Solar radiation)

45127

S/712/62/021/000/010/015  
A001/A101

3.7730  
AUTHORS:

Dvoryashin, A. S., Levitskiy, L. S.

TITLE:

Corpuscular solar radiation on the declining branch of the solar activity cycle

SOURCE:

Akademiya nauk SSSR. Krymskaya astrofizicheskaya observatoriya. Izvestiya. v. 27, 1962, 167 - 177

TEXT:

The authors enumerate observational data and theoretical investigations on the relation of geomagnetic disturbances to active regions on the Sun during the declining branch of the solar activity cycle. In the first and second chapters individual magnetic disturbances are correlated with active regions on the Sun during the period of the declining branch of the 17th cycle of solar activity, from February 1940 to May 1944. Active regions on the Sun were identified by flocculi. During the period investigated four most pronounced sequences were observed: 1) the sequence observed in revolutions 1188 - 1191; 2) the sequence which began on October 1, 1942, and continued in revolutions 1192 - 1194; 3) the sequence observed in revolutions 1196 - 1206, and 4) the

Card 1/3

Corpuscular solar radiation on the...

S/712/62/027/000/010/015  
A001/A101

sequence observed in revolutions 1200 - 1211. The supposed correlation between active regions and geomagnetic disturbances is confirmed by statistical investigations. Flocculi (active regions) are divided into two groups: 1) flocculi of group I which crossed the visible center of the disk or touched it while passing the central meridian, and 2) flocculi of group II for which the heliocentric angle is equal to or larger than  $60^\circ$ . Group II in its turn is divided into two subgroups: a) flocculi of group II<sub>f</sub> located in the same hemisphere as the visible center (favorable hemisphere), and b) flocculi of group II<sub>u</sub> located in the other hemisphere. All the groups were studied by the method of superposed epochs. The results are as follows: A right-hand maximum is observed for central flocculi at the phase + 5 days and a minimum at the phase + 3 days; no stable regularities are observed in relations plotted for non-central flocculi of group II. The result obtained confirms the existence of approximately radial corpuscular fluxes starting from active regions. In the third chapter the authors describe the physical characteristics of the flux. The speed of the flux, determined from the lag of geomagnetic disturbances of 4 - 5 days, is 400 - 500 km/sec. The corpuscular fluxes carry along "frozen-in" magnetic fields. At the distance of the Earth's orbit the field in the flux may be

Card 2/3

Corpuscular solar radiation on the...

S/712/62/027/000/010/015  
AG01/A101

$\sim 10 \gamma$ , and the density of the flux may attain  $n \approx 10^2 \text{ cm}^{-3}$ . A correlation was found between magnetic activity and brightness of zodiacal light and night sky. The flux is different from the so-called "solar wind" whose corpuscle density is  $4 - 5 \text{ cm}^{-3}$ . There are 3 figures. ✓

SUBMITTED: May 1961

Card 3/3

LEVITSKIY, L.S.

Hard X rays from solar flares. Izv. Kryn. astrofiz. obser. 29:  
146-151 '63. (MIRA 16:10)



L 14857-66 INT(1)/FBD GW/WS-2

ACC NR: AR5011846

UR/0269/65/000/004/0039/0039  
523.164.32

SOURCE: Ref. zh. Astronomiya. Otd. vyp., Abs. 4.51.277

AUTHOR: Levitakiy, L.S.

TITLE: Relationship between increased radio-radiation of the sun on meter waves and absorption in polar caps

CITED SOURCE: Izv. Krymsk. astrofiz. observ., v. 32, 1964, 84-87

TOPIC TAGS: solar radiation, magnetic field, polarization, proton

TRANSLATION: A study was made on the relationship between an increased flow of continued solar radiation on meter waves of 3h-3d duration with centimeter splashes and chromospheric flares. For this study, use was made of records from the Crimean Astrophysical Observatory and from other published transactions. It was noted that from 1957 to 1962 the continuous 3h-3d radiation had the same direction and polarization as the direction and polarization of type IV splashes and the median flow of prolonged noise storms. Thus, a conclusion was drawn regarding the relationship in the mechanical processes of these radiations. Following centimeter splashes related to proton flares, there usually was observed an increase in the flow on meter waves; however, if the proton flare originated in a limb, the meter radiation may not be observed on earth. Prolonged absorption on polar caps corresponds to powerful proton

Card 1/2

14857-66

ACC NR: AR5011846

flares. During this process an intensive radiatoradiation on meter waves was observed which lasted over 24 hours. This is explained by the fact that along with the accelerated protons in the magnetic fields of the crown, the electrons responsible for the prolonged radiatoradiation on meter waves were also retained. Bibliography. 13. T. Antonova

SUB CODE: 03

ENCL: 00

Card

2/2

ACC NR: AR6025789

SOURCE CODE: UR/0058/66/000/004/1021/1021

AUTHOR: Levitskiy, L. S.

TITLE: Proton flares in 1961-1962 and the radio emission connected with them

SOURCE: Ref. zh. Fizika, Abs. 4Zh155

REF SOURCE: Izv. Krymsk. astrofiz. observ., v. 34, 1965, 16-41

TOPIC TAGS: solar flare, solar radio emission, proton, chromosphere, solar astronomy

ABSTRACT: A comparison is made of absorption in the polar cap from data on the minimum reflection frequencies ( $f_{min}$ ), obtained in 1961-1962 at two Soviet high-latitude stations (Heis Island and Mirnyy) with chromospheric flares. Active regions are considered, in which these flares have occurred, and the connection between these regions and noise storms is investigated. The radio emission connected with proton flares is investigated. It is noted that: a) in some cases the proton flares are accompanied by bursts of radio emission, which in accordance with their characteristics do not correspond to conditions usually imposed on bursts of type IV; b) frequently a proton flare is accompanied by generation of bursts of type I. In most such cases one observes at centimeter wavelengths a burst of radio emission of long duration (hours), but of low intensity, of the "simple rise and fall" type. It is shown that the probability for the appearance of a prolonged (hours and more) increased radio emission at centimeter wavelengths after a flare accompanied by a burst of type IV at centimeter wavelengths increases with increasing area of the group of

Cord 1/2

L 47395-66

ACC NR: AR6025789

spots in which this flare has occurred. The east-west asymmetry in the arrangement of the proton flares over the sun's disc is considered, and also the delay of the growth of  $f_{min}$  relative to the start of the flare as a function of the coordinates of the flare. No noticeable asymmetry was observed in the number of proton flares on the eastern and western hemispheres of the sun, but a tendency for the lag from the western flares to decrease compared with the eastern ones. [Translation of abstract]

SUB CODE: 03

hs

ACC NR: AR6034901 SOURCE CODE: UR/0269/66/000/008/0054/0055

AUTHOR: Levitskiy, L. S.

TITLE: Proton flares in 1961--1962 and radio waves related to them

SOURCE: Ref. zh. Astronomiya, Abs. 8.51.438

REF SOURCE: Izv. Krymsk. astrofiz. observ., v. 34, 1965, 16-41

TOPIC TAGS: solar flare, radio wave, radio emission, proton flare, action region, burst, proton burst, median proton flux, flare duration, flare importance, kp index

ABSTRACT: The connection between proton solar flares and the development of active regions is studied. Following a thorough analysis, 17 proton flares which had been accompanied by a sharp increase in the minimal ionosphere reflection frequency (data from Soviet stations on Kheys and Mirnyy Islands) have been selected. In the majority of cases, proton flares were accompanied by type-IV bursts, although in some cases the characteristics of the bursts did not correspond exactly to type IV. All the flares were connected with seven active regions which existed from the first to the third solar rotation. In the majority of them several proton flares occurred on the visible side. Six of those regions were connected with noise

Card 1/2

UDC: 523.75:523.101.1

ACC NR: AR6034901

storms and there the proton flares were often followed by type-I bursts. It is noted that the "first" proton flares do not reveal the east-west asymmetry, but, compared with eastern flares, there is a tendency to a decrease in the delay of the arrival of particles from western flares on Earth. The investigation covers an epoch of virtually minimum solar activity. The values of the median flux at 200 mc, the duration and importance of the flares, data on type-IV radio emission bursts, the minimum ionosphere frequency, the value of the Kp-index, a table of data on Sun-Earth connections, and a table of data on proton flare bursts are given for the investigated periods. Bibliography of 32 titles. T. Antonova. [Translation of abstract]

SUB CODE: 03/

Card 2/2

LEVITSKIY, M. [Levyts'kyi, M.]

Antibiotics in animal husbandry. Nauka i zhyttia 12 no.10:42  
0 '62. (MIRA 16:1)

1. Glavnyy veterinarnyy vrach Upravleniya veterinarii Ministerstva  
proizvodstva i sagotovki sel'skokhozyaystvennykh produktov UkrSSR.  
(Antibiotics) (Stock and stockbreeding)

LEVITSKIY, M.I.

SUKHANOV, G.K., inzh.; LEVITSKIY, M.I., inzh.

The Bratsk Hydroelectric Power Station. Gidr.stroi. 26 no.11:  
47-56 N '57. (MIRA 10:10)

(Bratsk Hydroelectric Power Station)

APPROVED FOR

LEVITSKY, M.I., info.

Device for locating small packages and lockage. Foreign  
13 no.5:30 NY '65. (11-11 12:51)



LEVITSKIY, M.I., inah.

The Bratsk Hydroelectric Power Station project on the Angara  
River. Gidr. stroi. 32 no.2:1-8 F '62. (MIRA 15:7)  
(Bratsk Hydroelectric Power Station)

LEVITSKIY, M.I., inzh.

Erection of the main structures of the Bratsk Hydroelectric  
Power Station. Gidr. stroi. 32 no.3:1-5 Mr '62. (MIRA 16:7)

(Bratsk Hydroelectric Power Station—Concrete construction)

ZHIVUKHIN, S.M.; TOLSTOCHUZOV, V.B.; LEVITSKIY, M.M.

Synthesis of phosphonitrile chloride. Zhur.neorg.khim. 6 no.10:  
2414-2416 O '61. (MIRA 14:9)

(Phosphonitrile chloride)

34969

S/080/62/035/002/006/022  
D235/D302

15.9209

AUTHORS: Zhivukin, S. M., Tolstoguzov, V. B. and Levitskiy, M.M.

TITLE: Certain properties of oily oligomers of phosphonitrile chloride

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 2, 1962, 290-295

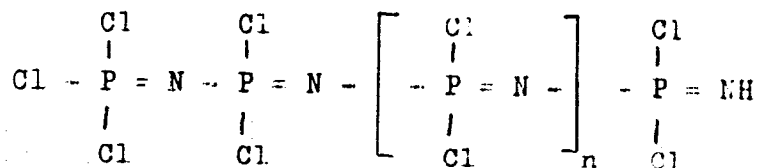
TEXT: The composition and structure of oligomers of phosphonitrile chloride and the properties of high molecular polymeric products obtained from them are studied. The oligomers were obtained by reacting  $\text{PCl}_5$  with  $\text{NH}_4\text{Cl}$  in a medium of chlorobenzene in the presence of quinoline. The trimer and tetramer were removed from the oligomers by extraction with petroleum ether. The yield of oligomers was 40 - 45% and the composition was within the limits P - 24.96-25.4%, N - 12.01-11.74%, Cl - 59.63-62.5%. The molecular weight was 1170 - 1390 and titration of a fraction of molecular weight 1200 showed a minimum of three polymer homologues. In order to elucidate the composition the infra-red spectrum in the frequency range 400 - 3800

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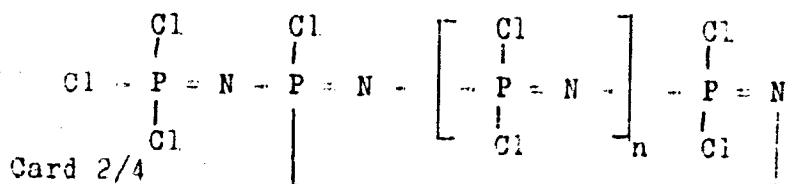
Certain properties of ...

S/080/62/035/002/006/022  
D235/D302

cm<sup>-1</sup> was studied. The groups P=N, OH and NH were discovered but not P-H or P-OH. The considered oligomers with a degree of polymerization of 10 to 12 have the following structure:



and a portion of the molecule must have the structure



Certain properties of ...

S/080/62/035/002/006/022  
D235/D302

The oligomers were subjected to polymerization in a glass ampoule for 4 hours at 192, 210, 226, 245 and 260°C. On increasing the temperature, consistency of the products changed from a brown paste to a dark brown or black resinous material possessing low adhesion to glass. Density of the samples after extraction with chloroform was found to be 1.58 - 1.68 at 20°C. There was no relationship between density and temperature of polymerization. A linear relationship was found between the composition of the soluble fraction and the temperature of polymerization which can be written:

$$\frac{M_{\text{sol.fract.}}}{M_{\text{sample}}} \times 100 = 175 - 0.57 t^{\circ}$$

The authors also studied swelling of the resin and discovered that the degree of swelling decreased with increasing temperature of polymerization. Ageing of the elastomers was considered concluding that the change in weight of the samples during ageing was mainly due to absorption of moisture from the air followed by reaction

Card 3/4

ACCESSION NR: AP4035102

S/0191/64/000/005/0023/0026

AUTHOR: Zhdanov, A. A.; Andrianov, K. A.; Baksheyeva, T. S.; Polikanin, N. A.;  
Levitskiy, M. M.

TITLE: Investigation of the properties of organosilicon polymers containing  
hydroxyphenyl groups.

SOURCE: Plasticheskiye massy\*, no. 5, 1964, 23-26

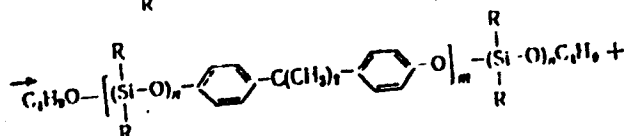
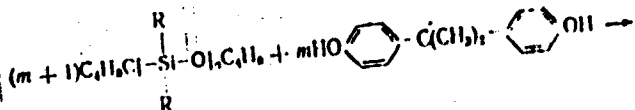
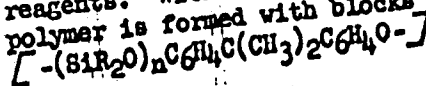
TOPIC TAGS: organosilicon polymer, hydroxyphenyl containing siloxane, ester  
interchange reaction, polymer chain growth, diphenylolpropane, polyphenylbutoxy-  
siloxane, diene reaction product, molded composition, physical property, mechanical  
property, cross linkage, polymerization

ABSTRACT: The reaction of forming organosilicon compounds containing the hydroxy-  
phenyl group, and the properties of the product polymers were investigated. The  
hydroxyphenyl group can be introduced into the siloxane chain by ester interchange  
of the diphenylolpropane (diene) with organosilicon polymers or oligomers contain-  
ing butoxy groups on the silicon atom. If the oligomer has only terminal butoxy  
groups the product formed will have diene groups at the ends of the chain. If the

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ACCESSION NR: AP4035102

butoxy groups are also on the side chain of the organosilicon polymer, the product will contain the diene group in each link of the polymer chain. The composition and properties of the end products are determined by the molecular ratio of the reagents. With a 1:1 ratio of diene:  $\alpha, \omega$ -dibutoxypolydimethylsiloxane a linear polymer is formed with blocks of the organosilicon molecules joined by the diene:



wherein  $\text{R}=\text{CH}_3$  or  $\text{C}_4\text{H}_9$ .

With a 2:1 ratio, the oligomer formed contains terminal diene groups:  
 $\text{HOC}_6\text{H}_4\text{C}(\text{CH}_3)_2\text{C}_6\text{H}_4\text{O}[\text{SiR}_2\text{O}]_n\text{C}_6\text{H}_4\text{C}(\text{CH}_3)_2\text{C}_6\text{H}_4\text{OH}$ .

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ACCESSION NR: AP4035102

Using the product of the 2:1 reagent ratio there is no viscosity change in going from the dimer to the tetramer, but in the 1:1 product the viscosity increases indicating growth of the polymer chain. When the polymer formed by reaction of polyphenylbutoxysiloxane with diene is completely polymerized (in 8-25 minutes) the product is fusible and soluble; when the polymethylbutoxysiloxane-diene reaction product is polymerized to 60-70% it gels, indicating crosslinkage. Molded fiberglass compositions containing 32% of these polymers were formed at 250-300 kgs/cm<sup>2</sup> at 145-150C, 1.5-2 min/mm and cured at 160C for 6-7 hours. Their physical and mechanical properties are tabulated. Orig. art. has: 4 tables, 4 figures and 3 equations.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: 00

NO REF SOV: 001

OTHER: 000

Card 3/3



**"APPROVED FOR RELEASE: 07/12/2001**

**CIA-RDP86-00513R000929630003-9**

**APPROVED FOR RELEASE: 07/12/2001**

**CIA-RDP86-00513R000929630003-9"**

COMMON ELEMENTS		PROCESSING AND PROPERTIES INDEX	
<p>24</p> <p>A simple method for the preparation of alumina for polishing. M. P. Levitskii. <i>Zametki po Khim. Zashch. 1940, 11, 676.</i>—A method is given for the prepn. of alumina for polishing metallographic sections. The alumina is pptd. from an alum soln. by treatment with <math>\text{NaHCO}_3</math>. M. G. Moore</p>		<p>13</p>	
<p>ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>FROM STRIATION</p>		<p>FROM STRIATION</p>	
<p>CLASS NO.</p>		<p>CLASS NO.</p>	

COMMON ELEMENTS										PROCESSES AND PROPERTIES INDEX										1ST AND 2ND CATEGORIES										100 AND 4TH CATEGORIES									
M																														19									
<p>Temperature in the Cutting of Metals. M. P. Levitsky (<i>Zhur. Tekhn. Fiziki</i>, 1946, 16, (4), 455-462).—[In Russian]. L. corrects an error in the integration of an equation given in an earlier paper (<i>ibid.</i>, 1940, 10, (13)).—N. A.</p>																																							
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																																							
100000 517-02104										100000 517-02104										100000 517-02104										100000 517-02104									

LEVITSKY, M. P.

"Comparing Cutting Methods for Positive and Negative Front Angles," Sta. 1 Instrum.  
No. 7, 1948

LEVITSKIY, M.P.

"The Problem of Durability of Cutters," Presented by G.K. Gedevanishvili, Corr.  
Mbr., Acad. Sci., Ukr SSR.

SO: Ssob. Akad. Nauk. Gruz SSR, Vol 10, No 7, 1949.

1ST AND 2ND CODES										PROCESSING AND PROPERTY CODES										3RD AND 4TH CODES									
<p>3445. The temperature of surface friction of solids (theoretical error in Bowden's work). M. P. LEVITSKY. <i>J. Tech. Phys., USSR</i>, 19, 1040-44 (Sept., 1949) in Russian.</p> <p>The paper criticized is by P. P. Bowden and K. E. Ridler (<i>Proc. Roy. Soc. A</i>, 154, 640 (1936)). It is shown that the generally accepted result of a linear relation between temp. and friction or relative velocity of sliding is wrong and due to a too elementary and, moreover, unfinished derivation by Bowden. The experimental part of Bowden's investigation was partly carried out. The rectified relation has the form <math>T = f(\sqrt{v})</math> and could be verified in all experiments on cutting of metals. B. F. KRAUS</p>																													
<p>ASB-11A METALLURGICAL LITERATURE CLASSIFICATION</p>																													
15000 15000										15000 15000										15000 15000									
15000 15000										15000 15000										15000 15000									

LEVITSKIY, N. P.

USSR/Physics - Friction

Sep 49

"Temperature of the Friction Surface Between Solids (A Theoretical Error in Bowden's Work)," M. P. Levitskiy, 5 pp

"Zhur Tekh Fiz" Vol XIX, No 9

Bowden erroneously concluded that temperature of friction surface depended linearly upon friction and relative slipping speed because he did not find an explicit expression for the coefficient  $\alpha$ . Author finds this explicit expression, and thus determines that temperature is a certain function of the square root

149785

USSR/Physics - Friction (Contd)

Sep 49

of the speed; confirmed experimentally. Submitted 7 Apr 49.

149785

LEVITSKIY, M. P.

Deformations (Mechanics)

Kinetic theory of hardening and relaxation during plastic deformation. Soob AN Gruz.  
SSR 12, no. 9, 1951.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.



LEVITSKIY, M. P.

Alloys

Isothermic growth of crystalline grains of metallic alloys. Zhur. tekhn. fiz. 22  
no. 3, March 1952

Monthly List of Russian Accessions, Library of Congress, August, 1952. UNCLASSIFIED.

LEVITSKIY, M. P.

USSR/Metals - Cutting

Apr 52

"Temperature During Cutting of Metals," M.P.  
Levitskiy

"Zhur Tekh Fiz" Vol XXII, No 4, pp 648-655

Author refers to his former articles ("Zhur Tekh Fiz" 10, 13, 1940; *ibid.* 16, 4, 1946) in which he derived theoretical formulas apparently very different. In current article he proves that his former formulas differ only in form. He also compares his 1-dimensional theory with the 2-dimensional theory of A.A. Dimitriev ("Zhur Tekh Fiz" 21, 7, 1951). Received 1 Aug 51.

216T56

1. LEVITSKIY, M. P.
2. USSR (600)
4. Metal Cutting
7. "Physical bases for metal cutting." Reviewed by M. P. Levitskiy. Vest.mash. 32 no.8  
1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1952. Unclassified.

LEVITSKIY, M. P.

⑦

*Physics*

8476\* Theory of Formation and Disintegration of Contact Bridges Between Surfaces During Friction. (Russian.)  
M. P. Levitskiy. Doklady Akademii Nauk SSSR, v. 92, no. 4,  
Oct. 1, 1953, p. 797-798.

Process of convergence of atomic lattices of surfaces during friction. Graph. 5 ref.

78 9-54

LEVITSKIY, M.P.

The concept of "activation energy" in solid state of matter. Zhur.  
tekh.fiz. 25 no.3:544-545 Mr '55. (MIRA 8:5)  
(Solids)

S/194/62/000/006/017/232  
D413/D308

AUTHORS: . Zedginidze, G.P., Ivanov, V.V., and Levitskiy, M.P.

TITLE: Some problems in the design of computers for the automatic control of the blast-furnace process

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1962, abstract 6-1-124 ya (V sb. Primeneniye vychisl. tekhn. dlya avtomatiz. proiz-va, M., Mashgiz, 1961, 183-191)

TEXT: It is observed that no complete mathematical description exists for the blast-furnace process, and therefore ЦНИИЧМ (TsNIICHM) and ТНУИСА (TNIISA) are developing zonal computers: for the high-temperature zone of direct reduction of iron (by coke, at the bottom of the furnace) for the medium-temperature zone in the charge where indirect reduction of iron (by gases) occurs; and for the throat zone near the mouth of the furnace. It is expected that these zonal installations will later be combined into a complex whose operation will be coordinated by a universal computer. Brief descriptions, circuit diagrams of the zonal computers and Card 1/2

Some problems in the design of ...

S/194/62/000/006/017/232  
D413/D308

formulas simulated by them are given. 9 figures, 10 references.  
[Abstracter's note: Complete translation.]

✓

Card 2/2

LEVIUS, M.S., arkhitektor; SHAPOVALOV, L.V., inzh.

Planning the construction of a new type of bunker trestle. Prom.  
stroitel. 40 no.8:36-38 Ag '63. (MIRA 16:8)

1. Sibirskiy gosudarstvennyy institut po proyektirovaniyu  
promyshlennogo stroitel'stva.  
(Blast furnaces--Design and construction)



[illegible]

TATARINOV, B. P.; LEVITSKIY, M. V.

"Determining the Specific Electrical Conductivity of Highly Diluted Solutions of Certain Electrolytes", Zhur, Obshch. Khim., 9, No. 17, 1939. Institute for Railroad Transport Engineers, Rostov-on-Don. Received 3 March 1939.

Report U-1614, 3 Jan 1952.

Sp. conductivity data are recorded for 0.000067--0.001n- $\text{Na}_2\text{CO}_3$ , - $\text{NaCl}$  - $\text{Na}_2\text{SO}_4$ , - $\text{CaCl}_2$ , and - $\text{MgSO}_4$ , all at  $25^\circ$

LEVITSKIY, M.V.

USSR.  
The carrying-over of salt with vapor. M. V. Levitskiy.  
J. Appl. Chem. U.S.S.R. 25, 617-61(1953) (Engl. translation).—See C.A. 48, 6207c.  
H. L. H.

**LEVITSKIY, M.V.**

~~XXXXXXXXXX~~  
Study of the carrying away of salts in steam. *Zhur.prikl.khim.* 26 no.7:  
686-690 J1 '53. (MLRA 6:7)

1. Severo-Kavkazskiy gorno-metallurgicheskiy institut.  
(Salts) (Electrolysis) (Evaporation)

LEVITSKIY, M.V.; TOTROV, G.V.; MAR'YENKOV, V.V.; LEVITSKIY, L.M.

Dispersed composition of dusts in complex ore mining. Izv.  
vys.ucheb.zav.; tsvet.met. 2 no.6:26-34 '59.  
(MIRA 13:4)

1. Severokavkazskiy gornometallurgicheskiy institut. Kafedra  
spetskursov gornogo dela.  
(Nonferrous metals) (Mine dusts)

FRANK, G.A., inzh.; FOSS, V.A., inzh.; LEVITSKIY, M.V., inzh.

Large cinder concrete blocks. Rats.i izobr.predl. v stroi.  
no.10:19-22 '59. (MIRA 12:11)

1. Proyektная kontora Bazstroyproyekt. (for Levitskiy).  
Po materialam tresta Bazstroy Sverdlovskogo sovnarkhosa.  
(Cinder blocks)

5 1310

29361  
S/149/61/000/005/001/008  
AG06/A101

AUTHOR: Levitskiy, M. V.

TITLE: On determining some properties of films formed by electrolytic solutions and surface-active substances

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Tsvetnaya metallurgiya, no. 5, 1961, 69-73

TEXT: The study of the physical and chemical properties, including electric conductivity, of films formed by electrolytic solutions and surface-active substances, is of greatest practical and theoretical interest. In this connection the author proposes a new electrode type to determine electric conductivity of the aforementioned films. The annular electrode frame serving to obtain the film is modified into semi-circular platinum wire electrodes; the wire ends are soldered into tightly connected glass tubes which are filled with mercury and connected to the electromeasuring unit. Thus the wire ring serves simultaneously as a carcass for holding the film and as electrodes for measuring the electric conductivity on a unit based on the Grayson circuit. This unit contains an audio oscillator with a 20 to 20,000 cycles current.

Card 1/3

2/361  
S/149/61/000/005/001/008  
A006/A101

On determining some properties ...

frequency range, an electronic oscilloscope, a thermostat, a plug resistance box, non-reactive variable resistances of 100 to 100,000 ohm, and two variable capacitors. The precision of this unit is sufficient to allow accurate determination of the electric conductivity. A series of experiments were made with 0.47 mm cross-section platinum wire electrodes, 4 mm internal diameter of the ring, and 0.5 mm distance between the parallel, and 0.3 mm distance between the free electrode ends. The experiments yielded a satisfactory reproducibility of the results. It appeared that the electric resistivity of the film was by 64 ohms (58%) higher than that of the solution; this is explained by the ordering of the quasi-crystal lattice of the electrolytic aqueous solution in the film. This ordering is highest for 0.1 n. LiCl and least for KCl. The sequence of electric resistivity of films established, namely  $\text{LiCl} > \text{NaCl} > \text{KCl}$ , is due to the ordering of that "disorder" which is introduced into the solvent by the ion, implanting into its lattice. This "disorder" increases with a greater radius of the ion and with its lesser energy of hydration. Loosening of the quasi-crystalline lattice increases self-diffusion and reduces electric resistivity or raises electric conductivity. There are 3 figures, 1 table and 15 references. 13 Soviet-bloc and 2 non-Soviet bloc.

Card 2/3



On determining some properties ...

29301  
S/149/61/000/005/01/008  
A006/A10.

ASSOCIATIONS: Severokavkazskiy gornometallurgicheskiy institut (North-Caucasian  
Institute of Mining and Metallurgy); Kafedra obshchey, fiziko-khimi-  
i analiticheskoy khimii (Department of General, Physical and  
Analytical Chemistry)

RECEIVED: May 24, 1961

Card 3/3

KRESTOVNIKOV, Aleksandr Nikolayevich; VIGDOROVICH, Vilenin Naumovich;  
 BELYAYEV, A.I., retsentsent; LEVITSKIY, M.V., kand.khim.nauk,  
 retsentsent; BURTSEVA, K.G., kand.khim.nauk, retsentsent;  
 SAVAL'SKIY, S.L., starshiy prepodavatel', retsentsent; CHERNOV,  
 A.N., red.; KURDOVA, Ye.I., red.isd-va; VAYNSHTEYN, Ye.B.,  
 tekhn.red.

[Chemical thermodynamics; selected articles for pyrometallurgists]  
 Khimicheskaya termodinamika; izbrannye glavy dlya pirometallurgov.  
 Moskva, Gos.nauchno-tekhn.isd-vo lit-ry po chernoi i tsvetnoi  
 metallurgii, 1961. 280 p. (MIRA 14:3)

1. Chlen-korrespondent AN SSSR (for Belyayev). 2. Kafedra obshchey i  
 fizicheskoy khimii Severo-Kavkazskogo gorno-metallurgicheskogo insti-  
 tuta (for Levitskiy, Burtseva, Saval'skiy).  
 (Thermodynamics) (Chemistry, Physical and theoretical)

LEVITSKIY, M.V.

Determining certain properties of films formed by electrolyte solutions and surface-active substances. Izv. vys. ucheb. zav.; tsvet. met. 4 no.5:69-73 '61. (MIRA 14:10)

1. Severokavkazskiy gornometallurgicheskiy institut, kafedra obshchey, fizicheskoy i analiticheskoy khimii.  
(Electrolytes--Conductivity)  
(Surface--Active agents)

LEVITSKIY, M. YA.

35315. Teoreticheskiy Analoz Raboty i Profilirovanie Gruppovykh Frez. V SB: 50 Let Kievsk. Politekhnikin-Ta. Kiev, 1948, S. 277-89

SO: Letopis'Zhurnal'nykh Statey, Vol. 34, Moskva, 1949

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Rez'bofrezerovanie. Moskva, Mashgiz, 1950. 192 p. illus.

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(Thread milling.)

DLC: TJI222.L4

SO: Manufacturing and Mechanical Engineering in the Soviet Union,  
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